
Work stresses and their potential impacts among teachers of governmental education schools

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Abstract

The aim of this project is to determine the work stress, its existence among the teachers of public education in Egypt and its health and psychological effects. It also aims at developing a proposed vision of a preventive and a remedial program for solving the problem of work stress and its possible impact on the public education teachers. The researchers implemented a work stress scale, designed by the research team, including professional, economic, social factors and those related to the physical work environment and administration. DASS scale was also implemented to measure health and psychological conditions on a sample of public education teachers with different professional fields. The main stresses of the public education teachers in Cairo and the extent of the existence of each type have been identified. Psychological, health status, and their implications have also been identified. The work stresses of the sample of the research were compared according to the variables of gender, age and field specialization. Recommendations claim the urgent need for a defined vision regarding developing strategies to improve the educational system, reduce stress factors of teaching profession, help teachers to develop their creativity and build opportunities for career development.

Key words: Professional stress, work stress, job satisfaction, coping strategies

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Introduction

Stress happens when people feel restless and dissatisfied in their own life. Stress due to work load appears in certain symptoms such as reluctance to come to work and having a feeling of constant restlessness associated with general physiological, psychological and behavioral stress. The National Institute for Occupational Safety and Health (NIOSH) defined job stress as, “the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the workers”. (NIOSH,1999)

Work stress spreads increasingly in different environments and societies, especially in the environments which require direct interaction with individuals. The concept of work stress has been established in institutions and organizations whose objectives depend directly on the human element who are expected to provide the required services effectively. Teaching profession requires direct interaction with the human element because it provides the society with qualified individuals scientifically, socially, technically and morally. Therefore, teachers are most likely to be exposed to stress more than other professionals because of the many conflicting and expected demands on their burden. Teachers often face many situations and conditions that expose them to have many pressures and influences associated with anxiety, fear, frustration and anger. Such feelings can affect their performance at work. This has resulted in many negative effects, including lack of professional performance, feelings of dissatisfaction and the inability to be creative in the classroom. As a result of these conditions, teachers become less motivated to work, suffer from psychological and physical troubles. This leads to low level of teachers' performance which inevitably affects students' achievement.

Several international and regional studies have shown that work stress have caused great losses because of its negative

psychological, health and social effects. At the local level, some studies were conducted on work stress, but they did not tackle the relationship between the state of health and psychological conditions of the samples of their studies regarding professional performance (Nadeem, Shaheen, et al,2011; Kaur,2016). In addition, many studies have been conducted in Egypt with regard to work stress in general such as Metawally (2000) and Kamel (2004). But their studies did not include the relation of health and psychological state of teachers and their impact on professional performance. These previous Egyptian studies were conducted in different circumstances apart from the current psychological, health, social, economic ...etc. ones. Therefore, there is a demanding need for a study devoted to the work stress of the Egyptian teachers to identify the sources and causes of their stress, and to determine their effects on the health and psychological status and the consequent ability to work under the pressures of the social, economic and environmental stresses.

Problem of the study

The problem of the current study can be summarized in the following main question:

What are the stresses of the teachers of public education in Egypt and their health and psychological effects?

From this question the following questions emerge:

1. What are the sources of work stresses among Egyptian teachers of public education?
2. What are the stresses widely spread among public education teachers in Cairo?
3. What are the health and psychological condition of teachers of public education in Cairo according to DASS measure of depression, anxiety and stress?
4. What are the effects of professional stress on health and psychological status of public education teachers in Cairo?

Aims of the study:

The study aims at:

1. specifying the characteristics of professional stresses among teachers of public education
2. measuring prevalence of professional stresses among teachers of public education
3. identifying the factors related to professional stresses among teachers of public education
4. specifying the probable effects of professional stresses among teachers of public education
5. evaluating health status of the study sample
6. studying probable health & psychological effects of professional stresses among teachers of public education
7. specifying the preventive measures for professional stresses among teachers of public education

Delimitations of the study:

- **Study community:** teachers of public education (males & females) in some primary, preparatory and secondary schools in Cairo.
- **Study sample:** the study was conducted on a representative group of teachers of public education of all fields of specializations (Arabic language, foreign languages, science, mathematics, social studies, gymnastics, home affairs, etc...)
- **Selection of the study sample:** A random sample of (730) teachers from the public education teachers of different stages; primary, preparatory and secondary schools in Cairo Governorate to conduct the study on (98) schools of different educational stages.
- The research group was classified according to the following variables:
 - 1 - Sex variable (teacher - parameter).
 - 2 - Age variable (less than 45 years - greater than 45 years).
 - 3 - Specialization variable

- 4- Smoking variable (smoker - non-smoker).
- 5 – Social status variable (married - not married: single, widowed, divorced).

- **Duration:** the study was implemented during November and December of the academic year 2018/2019
- **Study researchers:** staff members and their assistants of Faculty of Girls for Arts, Science and Education, Faculty of Education and Faculty of Medicine at Ain Shams University.

Study design:

The researchers followed two methods of research:

- 1- Descriptive design was used to specify professional stress, its causes and its effects by reviewing the literature in the field and the previously related studies.
- 2- Survey study was done by implementing the questionnaire of professional stress and its effects among a group of public education teachers

Research Methodology

- **Literature review:** the researchers reviewed the related literature and the previous studies on work stress, its causes and their various effects.

-Study tools

Two tools of study were used:

1. A semi-structured, self-administered questionnaire to assess work stress, its causes and their various effects was implemented. The following is a description of the questionnaire:

The researchers (15 staff members) designed a measure of stress based on “Likert Scale” to identify the work stress that teachers may be exposed to at public schools. It consists of 79 items divided into four sections related to the identified work stresses; namely, professional stress (33) items, economic and social stress (15) items, stress related to the

physical work environment (14) items and administrative stress (17) items. Teachers were asked to tick the right statement that shows the intensity of the stress he faces.

2. Scale of health and psychological effects: the researchers used the Arabic version of DASS 42: Depression, Anxiety & Stress Scale short-form which is a validated tool that was originally prepared by researchers from the University of Wales, Australia. Each of the three measures of "depression, anxiety and stress" contains 14 items divided into sub-scales of 2 to 5 with the same content. Teachers were asked to read each statement, and then circle one of the numbers "0, 1, 2, 3" which show the degree of applicability of the identified feelings to assess their exposure to each over the past week.

Ethical considerations:

The researchers were obliged by:

1. The approval of the Ministry of Education.
2. The approval of each teacher participated in the study and the guarantee of confidentiality of his/her personal information.
3. providing the ministry of education with the results of the study.

Data analysis and discussion of results:

Statistical analysis: Statistical package for social sciences (SPSS V 20) was used for data analysis. Data were summarized as arithmetical averages, standard deviations, then reliability analysis was done using Pearson correlation coefficients to find the correctness of the internal consistency and percentages of the work stress and find inter item correlation. Chi square test was used to determine the percentage of the differences between the variables.

Search results, discussion and interpretations

The Following Tables answer the Research Questions:

**Table (1): Professional stress (%) among studied teachers
(n= 730)**

Type of stress	Number (n)	%	Rank
Many students inside class	467	64	1
Bad behavior of students	465	63.7	2
Many office work tasks	450	61.6	3
Large educational material	405	55.5	4
Bad standards to evaluate my performance	402	55.1	5
Heavy work load	387	53	6
Large number of lessons	386	52.9	7
Weak student motives for education	359	49.2	8
Weak opportunities for teacher promotion	351	48.1	9

Table (2): economic and social stresses (%) among studied teachers (n= 730)

Type of stress	Number (n)	%	Rank
monthly salary is low	625	85.6	1
Additional incentives are low	558	76.4	2
Talk about private lessons create a bad picture about teachers	553	75.8	3
Scarce facilities for recreation	489	67	4
Doing additional work to improve income	488	66.5	5
Weak society appreciation of teacher role	468	64.1	6
Little recreation done by the school	466	63.8	7
Little support from parents	395	54.1	8
Job duties are done on expense of time of my family	357	48.9	9

Table (3): Distribution of severe (>65%) different types of stresses among studied teachers (n= 730)

Type of severe stress	Number	%
Professional stresses	527	72.2
Economic and social stresses	638	87.4
Physical stresses	437	59.9
Administrative stresses	438	60

Among studied teachers, the above-mentioned tables (1-3) showed that the most prevalent stress types are economic and social ones. This was reflected on teacher's psychiatric condition, originated from low salary and lack of incentives. Accordingly, the teacher is overwhelmed by private lessons. This result agrees with that of Hamaida's (2011).

Professional stress came as a second prevalent type because of the high numbers of students inside the class, and many office duties. This is in accordance with Kaga (2010) and Adel (2015) who found that professional stress among primary school teachers is originated from the increased number of pupils inside the class.

At the third level came physical and administrative stress due to the prototype of administration. This result agrees with that of El-Hady (2018) who attributed the existence of stress to the increasing number of administrative duties given to teachers.

Table (4): Distribution of depression and anxiety among studied teacher according to DASS scale

DASS scale	Depression		Anxiety		Stress	
	N	%	N	%	N	%
Normal	158	22.4	120	17	264	37
Mild	71	10.1	30	4.3	62	8.8
Moderate	102	14.5	71	10.1	107	15.2
Severe	94	13.3	67	9.5	84	11.9
Very severe	208	39.7	417	59.1	188	26.7
Total	705	100	705	100	705	100

Table (4) showed the stress of teaching profession related to psychiatric health among teachers of studied sample in general education. This was attributed to different causes like: inadequate instruments and supplies, bad ventilation and lightening, large class size, and many duties outside class.

The present study affirmed that work stresses among teachers of public education affected their health in a negative way. This is in accordance with Belahg (2016) and Kaga (2010) who found the same result.

Table (5): Correlation of professional stress and each of depression, anxiety & psychiatric stress on DASS scale

	Correlation coefficient	Statistical significance
Depression	0.111	0.003 *
Anxiety	0.138	0.000 *
Stress	0.125	0.01

*= statistically significant

Table (5) showed that among studied teachers correlation of work stress and each of depression, anxiety and psychiatric stress on DASS scale was very evident. This agrees with the result found by Metwally (2010), Mostafa (2004), and Kaga (2010).

**Table (6): environmental stresses (%) among studied teachers
(n= 730)**

Type of stress	Number (n)	%	Rank
Bad school furniture	368	50.4	1
Bad toilets	306	41.9	2
Bad teaching facilities (internet, monitors, computers)	299	41	3
Classes not suitable for students numbers	294	40.3	4
Bad school labs	278	38.1	5
Noisy school	264	36.2	6
Unsuitable environmental surroundings	245	33.6	7
Narrow school yard	241	33	8
Unsuitable board	200	27.5	9
Bad illumination	198	27.1	10

**Table (7): administrative stresses (%) among studied teachers
(n= 730)**

Type of stress	Number (n)	%	Rank
Administration do not assure moral or materialistic support	362	49.6	1
Additional administrative duties are exhausting	331	45.3	2
Lack of administration help	299	41	3
Administration likes picture of work	293	39.1	4
Weak participation in decisions	274	37.5	5
Administration decisions do not help work development	259	35.5	6
Conflicting administration decisions	234	32.1	7

Important results of the research project

From the Previous Tables the Following results can be reached

- The most pervasive prevalence of stress that public education teachers encounter were economic and social stress followed by profession stress followed by environmental and administration stress.
- Stress of the teaching profession was related to the psychiatric health of teachers of public education which affect his/ her psychological condition and generate frustration, tension, anxiety, a sense of threat. Thus, he/she loses his/her ability to thinking properly, suffers emotional imbalance, loses behavior and performance control of his/her duties and tasks.
- There was a statistically significant difference between profession stress and depression, anxiety and stress on the DAS scale.
- There was a statistically significant difference between economic and social stress on one hand and depression, anxiety and stress on the other hand on the DAS scale.
- There was statistically significant difference between environmental stress and depression, anxiety and stress on the DAS scale.
- There was a statistically significant difference between administrative stress and depression, anxiety and pressure on the DAS scale.

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- There were statistically significant differences between the stress ratios of teachers of general education between males and females in favour of males' economic, social and administrative stress.

Conclusions:

There is work stress among most of the teachers of general education in Cairo. This stress originates mainly from economic, profession, physical and administrative causes.

Recommendations:

In light of the above, it is recommended that:

1. A policy with specific goals and a clear vision is recommended to improve the educational system.
2. Periodical workshops should be implemented for teachers to deal with stress in order to raise the level of proficiency of performance and to adapt them to school environment.
3. Faculties of Education are recommended to implement psychological and personal standard tests during the process of students' enrolment in these faculties.
4. Ministry of Education should help the teacher to develop his creative and innovative abilities by satisfying his cultural, personal and economic needs in order to succeed in achieving future quality education for the children of his community.

5. Ministry of Education is recommended to improve school environment for teachers to provide them with serenity, stability and reach higher levels of achievement.
6. Teachers' economic conditions should be improved by monthly rewards and provided with opportunities for promotion and career development.
7. Teachers' social status should be improved, and the various pressures of the teaching profession should be reduced to achieve a better level of psychiatric health and carry out the profession responsibilities correctly.
8. Strategies to decrease work stress and their negative effects resulting from the workload should be developed. In addition, remedial solutions should be implemented to decrease work stress effects through coping strategies. These Strategies go through different stages which are:
 - a. Identifying the problem related to work stress: At this stage, the school must be convinced that there is a problem facing them because of work stress.
 - b. Identifying the causes of work stress: This is done by the school administration through engaging in deep, accurate study to detect the causes of stress in order to find proper solutions.
 - c. Developing work stress solutions: This stage is one of the most important stages because it is related to the development of an effective plan to solve the problems of stress.

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- d. Implementing the plan and following-up its implications: At this stage, the necessary procedures should be taken to implement stress management programs in the school through implementation committees and follow up committees to ensure the implementation of these procedures.
9. Effective management of stress: Because stress cannot be eliminated and disposed from daily life easily, the solution is effective management which turns it into positive stress. The following is a presentation of the strategy of stress management at the school level:
- Good application of management and its principles.
 - Redesigning the organizational structure of the school.
 - Participatory decision-making systems.
 - Analyze and clarify individuals' roles.
 - Identifying and setting goals.
 - Social support.
 - Team building.
 - Training.
 - Delegation of authority.
 - Guidance and support.
10. Teachers' professional and scientific competence should be developed in accordance with modern technological development.
11. The number of students in the classroom should be reduced so that the teacher can fully control them and distribute the time of the class period among all students.

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12. School principals should avoid the practices that cause role ambiguity by changing the organizational structure of the school and the delegation of powers to teachers each according to his abilities.
 13. Objective supervision and evaluation of teachers is recommended. Besides, the authorship should urge them to develop professionally in their fields of specialty.
 14. Experienced teachers teaching work load should be reduced.
 15. The administrative burden of the teacher should be reduced through assigning co-teachers to do the administrative tasks.
 16. The need to have psychologists within the educational institutions to take care of different types of stress which teachers suffer from.

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